

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-3 (Canceled).

4. (Currently amended) A resin composition for manufacturing optical fiber ribbon comprising

- a) a photopolymerizable urethane acrylate oligomer containing polydimethylsiloxane;
- b) a monomer;
- c) a photoinitiator;
- d) a leveling/defoaming agent; and
- e) an antioxidant;

wherein the photopolymerizable urethane acrylate oligomer containing polydimethylsiloxane is synthesized from a composition comprising

i) a first polyol compound containing polydimethylsiloxane and selected from the group consisting of hydroxy-terminated polydimethylsiloxane, 1,3-bis(hydroxybutyl)tetramethyldisiloxane, 1,4-bis(hydroxypropyl)tetramethyldisiloxane, and a mixture thereof,

- ii) a second polyol compound,
- iii) a polyisocyanate,
- iv) an acrylate alcohol,
- v) a urethane reaction catalyst, and
- vi) a polymerization inhibitor,

wherein the first polyol compound containing polydimethylsiloxane is in an amount of 5 to 25 weight% of the photopolymerizable urethane acrylate oligomer composition; and the second polyol compound has a molecular weight of 100 to 10,000; is selected from the group

consisting of polyester polyol, polycarbonate polyol, polycaprolactone polyol, tetrahydrofuran propyleneoxide ring opening copolymer, ethylene glycol, propylene glycol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, neopentyl glycol, 1,4-cyclohexane dimethanol, bisphenol A, bisphenol F diol, and a mixture thereof; and comprises 5 to 30 weight% of the photopolymerizable urethane acrylate oligomer composition.

5. (Canceled).

6. (Canceled)

7. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the polyisocyanate is selected from the group consisting of 2,4-tolylenediisocyanate, 2,6-tolylenediisocyanate, 1,3-xylenediisocyanate, 1,4-xylenediisocyanate, 1,5-naphthalene diisocyanate, 1,6-hexanediisocyanate, and isophorone diisocyanate, and is used in an amount of 20 to 40 weight% of the photopolymerizable urethane acrylate oligomer composition.

8. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the acrylate alcohol is selected from the group consisting of 2-hydroxyethyl methacrylate, 2-hydroxypropyl methacrylate, 2-hydroxybutyl methacrylate, 2-hydroxyethyl acrylate, 2-hydroxypropyl acrylate, 2-hydroxy-3-phenyloxypropyl methacrylate, 4-hydroxybutyl acrylate, neopentylglycol monomethacrylate, 4-hydroxycyclohexyl methacrylate, 1,6-hexanediol monomethacrylate, pentaerythritolpentamethacrylate, dipentaerythritolpentamethacrylate, and a mixture thereof, and comprises 20 to 35 weight% of the photopolymerizable urethane acrylate oligomer composition.

9. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the urethane reaction catalyst is selected from the group consisting of copper naphthenate, cobalt naphthate, zinc naphthate, n-butyltinlaurate, trisethylamine, 2-methyltriethylenediamide, and a mixture thereof, and comprises 0.01 to 1 weight% of the photopolymerizable urethane acrylate oligomer composition.

10. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the polymerization inhibitor is selected from the group consisting of hydroquinone, hydroquinone monomethylether, para-benzoquinone, phenothiazine, and a mixture thereof, and comprises 0.01 to 1 weight% of the photopolymerizable urethane acrylate oligomer composition.

11. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the monomer is selected from the group consisting of phenoxyethylacrylate, phenoxydiethylene glycol acrylate, phenoxytetraethylene glycol acrylate, phenoxyhexaethylene glycol acrylate, isobornyl acrylate, isobornyl methacrylate, N-vinylpyrrolidone, bisphenol ethoxylate diacrylate, ethoxylate phenol monoacrylate, polyethylene glycol 200 diacrylate, tripropylene glycol diacrylate, triethylpropane triacrylate, polyethyleneglycol diacrylate, ethoxylated trimethylol propane triacrylate, pentaerythritol tetraacrylate, 1,4-butanediol diacrylate, 1,6-hexanediol diacrylate, ethoxylated pentaerythritol tetraacrylate, 2-phenoxyethyl acrylate, ethoxylated bisphenol A diacrylate, and a mixture thereof, and comprises 15 to 50 weight% of the resin composition for manufacturing optical fiber ribbon.

12. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the photoinitiator is selected from the group consisting of 1-hydroxy-cyclohexyl-phenyl-ketone, 2-methyl-1((4-(methylthio)phenyl)-2-morpholinopropan-1-one, a mixture of 1-hydroxy-cyclohexyl-phenyl-ketone and benzophenone, 2,2-dimethoxy-1,2-diphenylethane-1-one, 2-hydroxy-2-methyl-1-phenyl-propan-1-one, a mixture of bis(2,6-

dimethoxybenzoyl)-2,4,4-trimethyl-phenyl-pentylphosphineoxide and 1-hydroxy-cyclohexyl-phenyl-ketone, a mixture of bis(2,6-dimethoxybenzoyl)-2,4,4-trimethyl-phenyl-pentylphosphineoxide and 2-hydroxy-2-methyl-1-phenyl-propan-1-one, and comprises 3 to 15 weight% of the resin composition for manufacturing optical fiber ribbon.

13. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the leveling/defoaming agent is selected from the group consisting of an acrylated polydimethylsiloxane leveling agent, a polyacrylate leveling agent, a polyacrylate copolymer leveling agent, a polysiloxane defoaming agent, an acrylated polyester siloxane copolymer, and a polyester siloxane copolymer, and comprises 0.1 to 5 weight% of the resin composition for manufacturing optical fiber ribbon.

14. (Previously presented) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the antioxidant is selected from the group consisting of pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate, pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate, octadecyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl)-propionate, and a mixture thereof, and comprises 0.1 to 5 weight% of the resin composition for manufacturing optical fiber ribbon.

15. (Previously presented) A method of preparing resin for manufacturing optical fiber ribbon, comprising curing the resin composition of claim 4 by photo irradiation.

16. ((Previously presented) The method according to claim 15, wherein the resin has 23 dyne/cm² or less surface tension.

17. (Previously presented) A resin for manufacturing optical fiber ribbon, wherein the resin is manufactured by the method of claim 15.

18. (Previously presented) The resin according to claim 17, wherein the surface tension of the resin is 23 dyne/cm² or less.

19. (Previously presented) The resin according to claim 17, wherein the resin has a shrinkage of 7.2% or less when measured by an ASTM (American Society for Testing and Materials) D-792 method.

20. (New) A resin composition for manufacturing optical fiber ribbon according to claim 4, wherein the first polyol compound containing polydimethylsiloxane has a molecular weight between 100 and 10,000.

21. (New) The resin composition according to claim 20, wherein the second polyol compound is polycaprolactone polyol.